

Amendments to the Claims

This listing of claims will replace all prior version, and listings, of claims in the application:

Listing of Claims:

1 through 6 (Cancelled)

7. (Original) An implantable tissue-stimulating device comprising:

a resiliently flexible elongate member having a proximal end and a distal end and at least one electrode mounted thereon between said proximal and distal ends for delivering electrical stimulation; and

a sheath comprised at least in part of a porous material disposed over at least a portion of the elongate member;

wherein at least some of the pores of the sheath have at least one bioactive substance disposed therein prior to implantation, said at least one bioactive substance being adapted to migrate from the pores following implantation of the member.

8 through 23 (Cancelled)

25. (Original) A drug delivery device comprising:

a resiliently flexible elongate member having a proximal end and a distal end for implantation within the body;

wherein at least a portion of said elongate member is comprised of a biodegradable, biocompatible polymeric material having at least one bioactive substance impregnated therein, said at least one bioactive being adapted to be released upon at least partial degradation of said polymeric material.

26. (Currently Amended) The drug delivery device of claim 24 ~~or claim 25~~ wherein the resiliently flexible elongate member forms part of or is used in conjunction with an implantable tissue-stimulating device having at least one electrode mounted thereon.

27. (Currently Amended) The drug delivery device of claim 26 wherein the implantable tissue-stimulating device comprises a ~~cochlear~~ hearing implant electrode assembly.

28 through 37 (Cancelled)

38. (Original) An implantable tissue-stimulating device comprising:

a lead;

a resiliently flexible elongate member extending from the lead and having a proximal end and a distal end and at least one electrode mounted thereon between said proximal and distal ends for delivering electrical stimulation; and

a bioactive substance delivery means adapted to deliver at least one bioactive substance to the implantee at a location spaced from the distal end of the member during and/or following implantation of the device;

wherein the substance delivery means comprises a body defining a chamber and an outlet in communication with the chamber through which bioactive substance can exit the body and further wherein the body is relatively slidably mounted to the lead of the device.

39. (Currently Amended) The implantable tissue-stimulating device of claim 38 wherein the device is a ~~cochlear~~ hearing implant electrode assembly.

40. (Currently Amended) The implantable tissue-stimulating device of claim 38 ~~or claim 39~~ wherein the outlet of the substance delivery means is positionable outside and adjacent the cochleostomy site.

41. (Currently Amended) The implantable tissue-stimulating device of ~~any one of claims 38 to 40~~ wherein the lead includes a stop means that prevents the body of the substance delivery means slidably moving relatively past the stop means and onto the elongate member.

42. (Currently Amended) The implantable tissue-stimulating device of ~~any one of claims 38 to 41~~ wherein the body of the substance delivery means comprises an annular member that is positioned around the lead of the stimulating device.

43. (Original) The implantable tissue-stimulating device of claim 42 wherein the annular member comprises a first portion and a second portion, the second portion having an outer diameter less than an outer diameter of the first portion.

44. (Currently Amended) The implantable tissue-stimulating device of ~~any one of claims 38 to 43~~ wherein the outlet of the body is positioned in the distal end of the body and

wherein the body includes an inlet in the proximal end of the body such that the inlet and outlet are in communication with each other.

45. (Currently Amended) The implantable tissue-stimulating device of ~~any one of~~ claims 38 ~~to 44~~ wherein the chamber in the body acts as a reservoir for a bioactive substance and wherein the bioactive substance in the reservoir leaches from the chamber into an implantee.

46. (Currently Amended) The implantable tissue-stimulating device of ~~any one of~~ claims 38 ~~to 45~~ wherein the outlet includes a semi-permeable membrane.

47. (Original) The implantable tissue-stimulating device of claim 44 wherein the inlet of the body is in communication with an additional reservoir for the bioactive substance, said additional reservoir positioned either external or internal the body of the implantee.

48. (Original) The implantable tissue-stimulating device of claim 47 wherein a catheter extends from the inlet to the additional reservoir and wherein a pump transfers the bioactive substance from the additional reservoir into the chamber of the body for subsequent delivery to the appropriate site of action.

49. (Original) A method of delivering at least one bioactive substance to a desired site of action adjacent a cochleostomy within a patient using a device of claim 38, the method comprising the steps of:

forming a cochleostomy;

inserting the elongate member through the cochleostomy;

closing the cochleostomy; and

slidably positioning the body of the bioactive substance delivery means adjacent the cochleostomy and allowing said at least one bioactive substance to exit therefrom.

50. (Currently Amended) The implantable tissue-stimulating device of ~~any one of~~ claims 38 ~~to 49~~ wherein the bioactive substance is selected from the group consisting of agents that promote healing, substances that prevent bleeding or at least excessive bleeding, substances that prevent the growth of tissue, including scar tissue, pharmaceutical compounds including anti-inflammatory agents, antibiotics, steroids, substances that assist in reducing the resting potential of neurons, neurotrophic factors including neurotrophins, neuropoietins, insulin-like growth factors, transforming growth factors beta, fibroblast

Application No. To Be Assigned

growth factors and other growth factors such as transforming growth factor alpha, platelet-derived growth factor and stem cell factor.